CORPS'PONDENT

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US Army Corps of Engineers
Portland District

INSIDE **THIS ISSUE:**

Don Dickison, left, Kiewit Pacific south jetty project manager, accepts a commemorative print from Portland District Commander Col. Tom O'Donovan, as Kevin Tapani, center, looks on. Tapani Underground was the contractor for the north jetty interim repairs; Kiewit Pacific was the contractor for the south jetty repairs. Both were honored for outstanding safety and no time lost due to accidents. The Corps celebrated completing the interim repairs to the critically important jetties at the Mouth of the Columbia River Sept. 14.

Corps of Engineers Photo

Commander's Column

Happy New Year! Of course I mean new fiscal year, since Oct. 1 was the beginning of Fiscal Year 2008. It seems like a good time to talk about fiscal responsibility.

Col. Thomas O'Donovan

We sometimes hear about public servants who have lost the confidence of those they serve because of some financial misdeed or another. With computers, Blackberries and cell phones, information gets out faster than ever – accurate or otherwise. The appearance of impropriety is enough to cause trouble, so it's important to pay attention to how our actions appear to the public.

Every federal employee is required to complete annual ethics training and anyone who has some approval or requesting authority for travel, time and attendance or credit cards must take an initial class and a bi-annual refresher in federal appropriations law.

Fiscal responsibility is a key factor in the District's Focus for Success, since it directly impacts our efforts at teamwork, integrity, relationships and results.

There are less visible aspects to fiscal responsibility, like knowing how to appropriately purchase something. The bottom line is, you can't obligate the government unless you are authorized to do so, including a verbal agreement. Only authorized contracting personnel and government credit card holders can do that. Sometimes we do everything right, but still the vendor mistakes our conversations for a commitment. The only way out of that is to clearly tell them you are not placing an order; that someone will call with the authority to request and pay for the order.

Another concern can come from wanting to achieve the mission and fulfill the wishes of your supervisor. We want to do the right thing, but without asking, "how can I achieve this ethically?" we might do the wrong thing instead. If there's any question of how your actions might be perceived, ask the question. Many of you have probably heard the old military adage about it being better to ask forgiveness than permission, but it does not pertain to fiscal responsibility. When you are dealing with government funds, asking permission is always better.

We have employees who are skilled in answering these types of questions in our Contracting, Office of Counsel and Resource Management offices. For instance, Dean Criscola, as the chief of Resource Management, probably gets more questions than any of the others. During my visits to the projects and other agencies, ideas about how to improve our practices come up and I need to know if I can implement changes to accomplish the improvements. Although I might say, 'I want to do this action,' Dean knows I am asking if it's possible ethically and will respond in one of three ways: yes you can do it that way; no it isn't possible, but here's how you could do it ethically; and no, sir, it isn't possible. Whether it's because I'm getting smarter at what I'm asking, or that Dean is getting better at helping me get to an ethical yes, he doesn't tell me no very often. Believe me, if I can't do something ethically, he will tell me – and I count on that. I may not like it, but I know he is only trying to keep us out of ethical trouble.

As we begin a new fiscal year, I ask you to remember your fiscal responsibility. Do all you can to safeguard government assets, whether it's paper and pens, vehicles, or construction equipment, because they're not our resources, they are all owned by the public and we owe them our very best efforts.

Essayons!

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US Army Corps of Engineers
Portland District

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2007 Combined Federal Campaign Kicks off October 10

The CFC is the world's largest and most successful annual workplace charity campaign for hundreds of local, national, and international charitable organizations working on issues you care about. More than 300 CFC campaigns throughout the country and internationally help raise millions of dollars each year. Pledges made by federal civilian, postal and military donors during the campaign season support eligible non–profit organizations that provide health and human service benefits throughout the world.

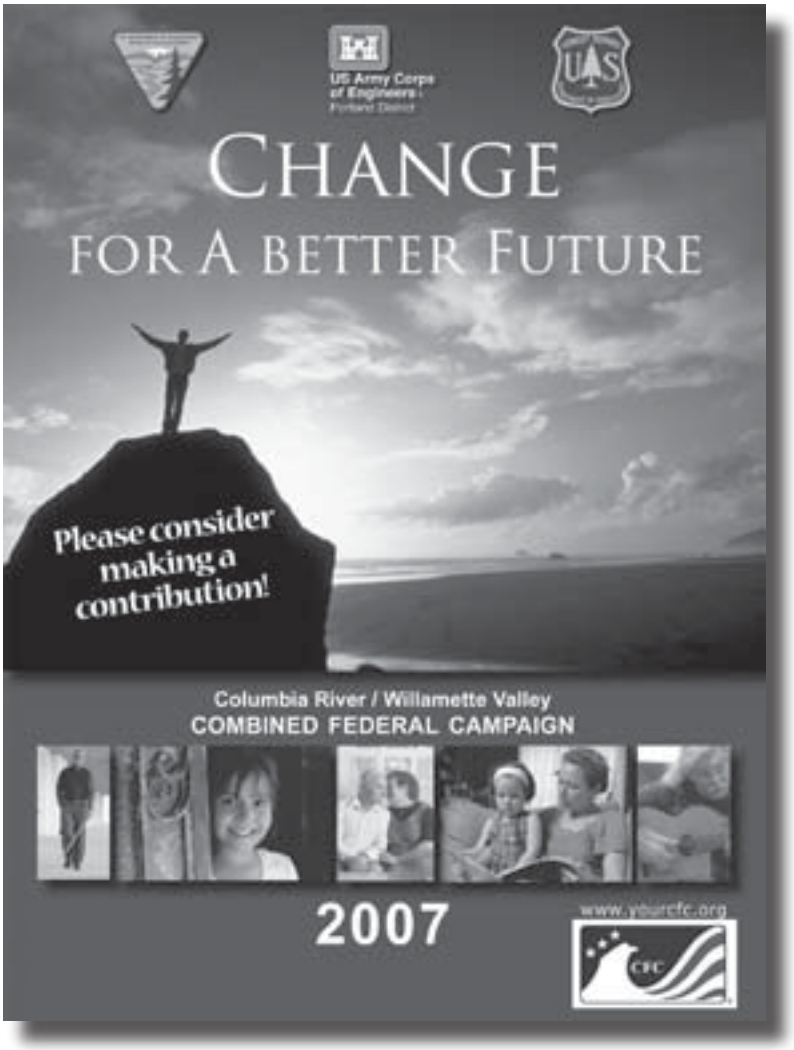
Don't miss any of these great events … they're just one more way to contribute to the Combined Federal Campaign!

CFC Opening Ceremony:

Oct. 10: 11a.m. – noon, 3rd floor conference rooms.

Fifteen local charitable organizations are invited to meet with you at Robert Duncan Plaza. Special guests will include dogs from the Dove Lewis Animal Hospital and Oregon Guide Dogs for the Blind.

Register to win this year's door prize—a Washington and Oregon Recreation Pass, good for admission to all federal recreations sites that charge admission, as well as many state parks in these two states. Tickers are $1 and available at the door.



Walking the Esplanade: Oct. 17: 9 a.m. – 10 a.m.

Instead of taking a coffee break, gather your coworkers for a midmorning break of fresh air with a walk on the Willamette River Esplanade. Choose either the 1.5 or 3-mile route.

Purchase tickets in advance from a CFC coordinator or at the eastside lobby entrance of Robert Duncan Plaza the day of the event. Tickets are $5. Maps will be provided.

Chili Cook Off: Oct. 18th: 11 a.m. – 1 p.m., 3rd floor conference rooms.

Who makes the best chili in RDP? You be the judge! Employees are encouraged to bring a crockpot of their tastiest creation. Your coworkers will taste and judge. If you want to enter the competition, please sign up with a CFC coordinator. For a $5 entry fee, you can sample the chili and cast up to five votes for your favorite.

The Frankentester and the problematic seal

By Jennifer Sowell, Public Affairs Office

Necessity is the mother of invention. This statement rings most true in the face of real-world examples. When seals that were responsible for keeping nearly 1,000 gallons of oil in the U.S. Army Corps of Engineers dredge *Essayons'* pump motors - and therefore out of the water - proved unreliable, a solution was necessary. In response, the maintenance staff at the U.S. Government Moorings invented a machine to test the seals prior to installing them on the dredge. The overside dredge pump motor seal test stand, or simply the Frankentester, was born.

The *Essayons* is unique in that its dredge pump motors go over the side and into the water as part of the dragarm assembly, rather than being housed within the hull. This over-the-side design, while much more efficient for dredging, requires special seals to keep oil from these overside dredge pump motors out of the water. The seals are small but critical for keeping the dredge at work and preventing damage to the environment.

"Sometimes the seals would last a full dredge season and sometimes they would last just a few days," said Bill McKay, port mechanical engineer for the *Essayons.*

"We needed something we knew would last, because it's just too important," said Mac Robison, chief of the plant maintenance section at the Moorings.

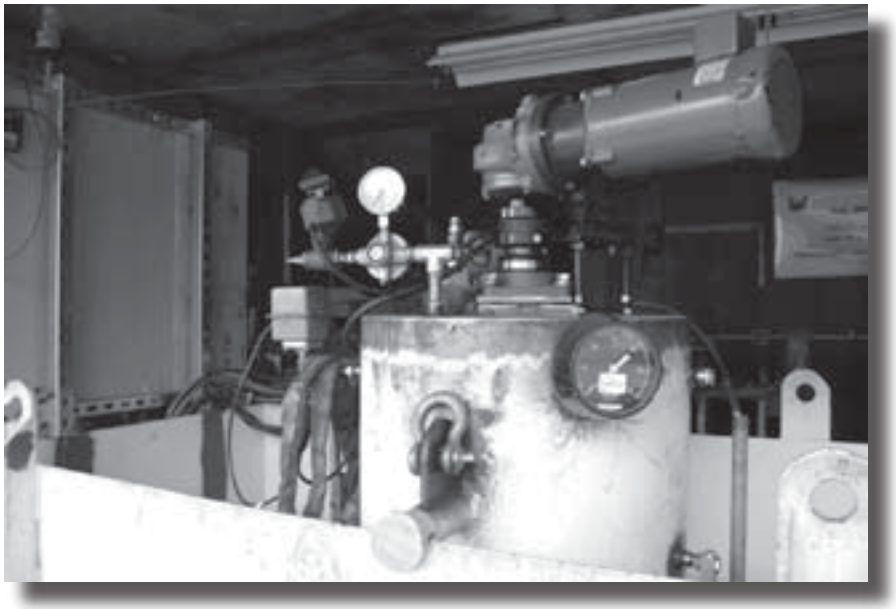
Sudden failures of the seals accounted for nearly 30 percent of the oil spills, or 95 gallons, from the *Essayons* since September 1999. Replacing the seals usually took three days and cost $80,000 per day, meaning lost time and increased costs for the dredge, as well as causing unacceptable environmental impacts.

"The seals require special tooling, extraordinary effort and a special touch to install," said McKay. "The first formulation and initial conception of the [overside dredge pump] motor seal test stand was in 1994, after a particularly exasperating effort to install the original seal design by the original method," he added.

Due to changes in how the seals were installed, the test stand was set aside for nearly 10 years, since it was developed for the original method.

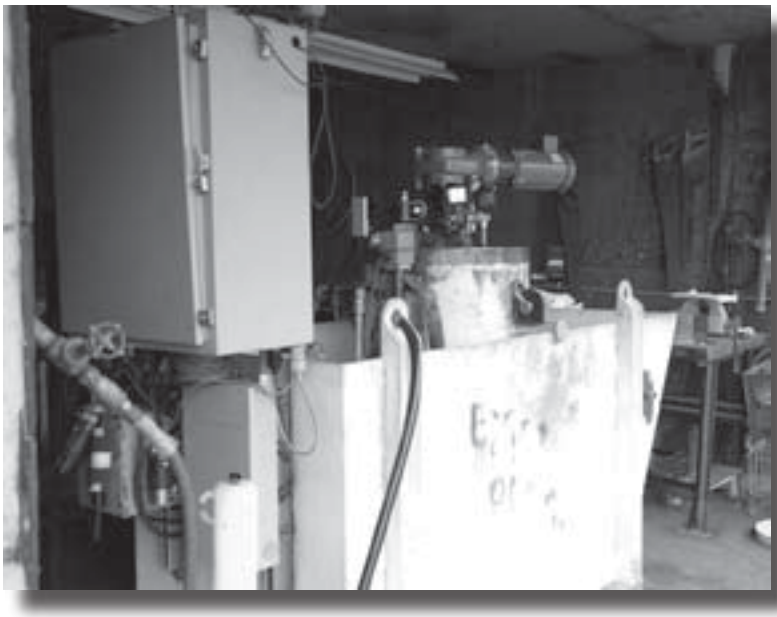
In 2005, the Corps realized a new seal design was needed, not just a new method of installing. To assess the new designs, they pulled out the Frankentester to ensure the design would meet engineering requirements for installation simplicity, operating requirements and long-term reliability.

"The goal is zero leakage and a minimum of a full dredge season of continuous use," said McKay.



The upper section of the Frankentester includes the angle gear drive and motor that turns the shaft on which the seal is mounted.

The Corps used the Frankentester on potential new seal designs and last year found one that appeared to meet all the requirements. The seal withstood about 2,600 hours of near-continuous use under varying conditions; they subjected it to maximum and minimum pressure differentials, varying oil temperatures and viscosities, and nearly 1,000 hours of start/stop cycles with no significant leakage. "We burned up a gear box trying to destroy that seal," said Robison.



The Frankentester is set up to replicate the working conditions of the overside dredge pump as closely as possible to provide a more accurate test of the OSDP seal.

While even the best-designed test platform can't fully replicate real-world conditions, the Frankentester comes close, according to McKay.

"It spins at the same rpm, operates under water at the same pressure differential across the seal, and at the same oil temperature," said McKay. "It isn't elegant, but it's fully functional and able to simulate operating conditions that are most likely to effect seal life."

The tester logs data for pressure, temperature and time, which provides information about when and how problems occur.

Everything seemed to be on track, but when the new seals were installed in March, they failed almost immediately.

The reason for the contradictory results- a flawless run on the Frankentester followed by failure once installed on the dredge- is still unknown.

Although the seals failed when they were installed on the dredge, the Corps is continuing to work with the vendor to come up with a seal that is reliable and easy to install by May 2008.

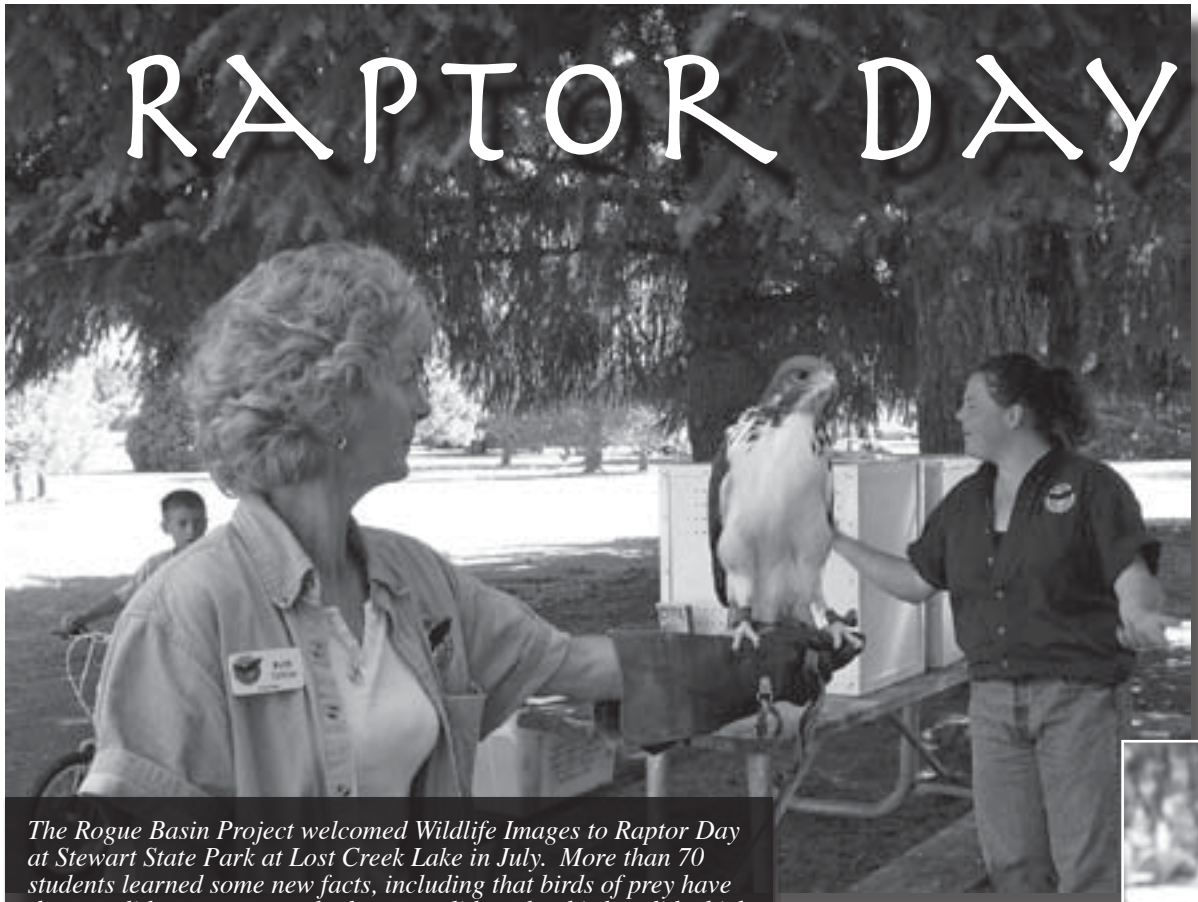
"The vendor has been really good to work with," said McKay. "They are continuing to rework their seal design to meet our requirement of zero leakage. That's a tough goal for a mechanical seal."

"This is an extremely important issue to resolve before the next dredging season," said Robison. "We need a seal that is robust enough to rely on and not have to constantly worry about."

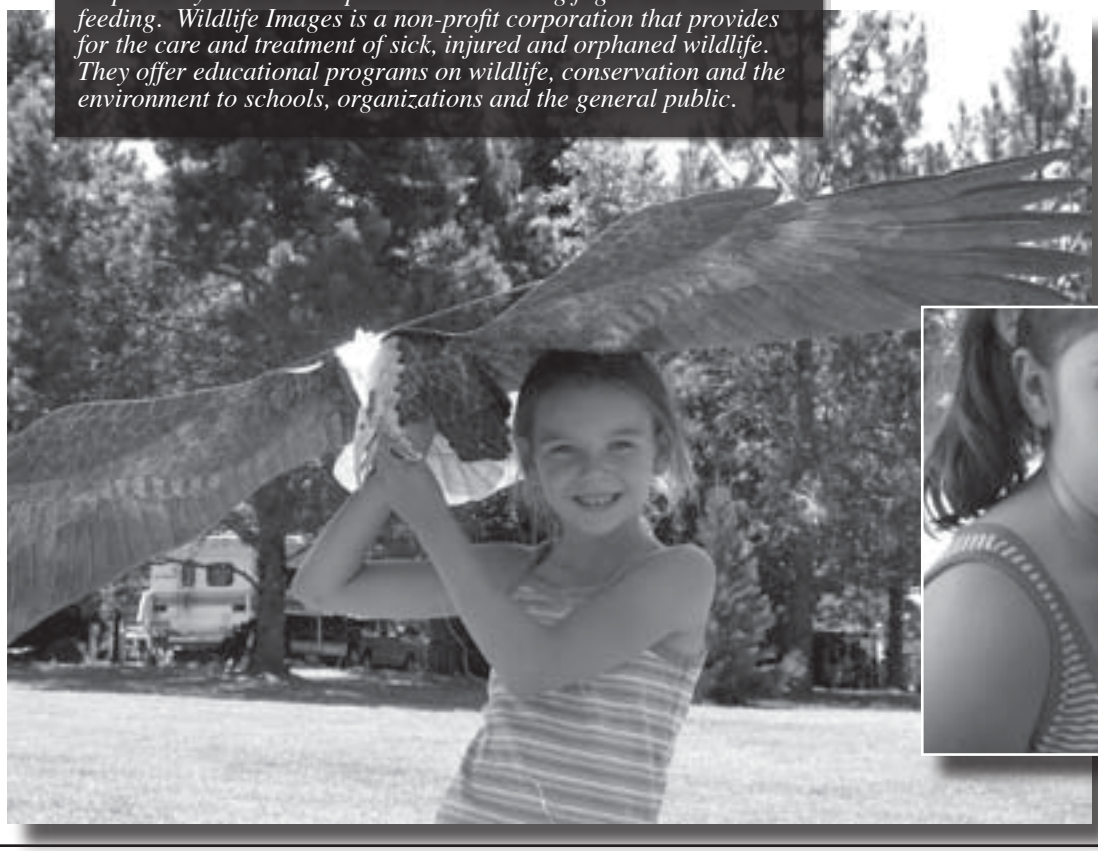
Corps of Engineers Photos

The lower section of the Frankentester is a large tub that is filled with salt water when testing. When submerged in the tub of water, the oil tank acts as the overside dredge pump motor. The seal must keep oil in the tank from leaking out into the tub of water.

RAPTOR DAY



The Rogue Basin Project welcomed Wildlife Images to Raptor Day at Stewart State Park at Lost Creek Lake in July. More than 70 students learned some new facts, including that birds of prey have three eyelids: an upper and a lower eyelid, and a third eyelid which keeps the eyes moist and protects them during flight and while feeding. Wildlife Images is a non-profit corporation that provides for the care and treatment of sick, injured and orphaned wildlife. They offer educational programs on wildlife, conservation and the environment to schools, organizations and the general public.



At Lost Creek

Corps of Engineers Photos

Educational Programs

Bonneville park ranger takes national interpretive award

By Amy Echols, Public Affairs Office

A particular U.S. Army Corps of Engineers park ranger at Bonneville Lock and Dam is making a name for himself as a storyteller and juggler, all while explaining hydropower, salmon, and the Corps' mission.

David Weiss recently won the 2007 Hiram M. Chittenden Award for Interpretive Excellence. Weiss was selected from a field of five Corps finalists from around the country, for his service at the Corps' largest and most-visited interpretive center.

David Weiss, a Corps park ranger for 20 years, is right at home touring the public through the Bonneville powerhouse and demonstrating the enthusiasm that helped him earn the honor of the Corps' 2007 Chittenden Award.

Each year, the Chittenden Award recognizes the superb interpretive efforts and accomplishments of the Corps' park rangers. Nominees are selected at the district level and advance through their region to a national level, peer-review selection process. Chittenden was a renowned U.S. Army officer, engineer, author and historian who exemplified the best in interpretation.

"[David's] interpretive programs demonstrate creativity and originality as he uses props, juggling, displays, and storytelling to help people relate to the National Historic Landmark, Bonneville Lock and Dam," said Pat Barry, Weiss' supervisor and a previous Chittenden Award winner. "He uses them to illustrate technical information and scientific concepts so everyone can understand."

"David always treats visitors to interesting and engaging programs. They leave with a clearer understanding of the role the Corps plays in their lives," Barry said. Weiss can lead an educational program for school age children and then switch

in·ter·preter **Function: noun**
1 : one that interprets : as a : one who translates orally for parties conversing in different languages b : one who explains or expounds

in·ter·pre·ta·tion **Function: noun**
1 : the act or the result of interpreting : explanation
2 : a particular adaptation or version of a work, method, or style
3 : a teaching technique that combines factual with stimulating explanatory information <natural history interpretation program>

Source: Merriam-Webster's Online Dictionary

gears and guide professional engineers on a tour, Barry said. "He adapts to the needs of each group he meets, one group after the next."

Weiss uses a variety of interpretive techniques, knowledge and a cheerful approach to help visitors feel at ease while they learn more about the Corps of Engineers and their environment.

With 20 years of interpretive experience, Weiss originally considered a career in teaching, but found the right mix of classroom and field trip in the interpretive arena at Bonneville.

"My father was an outdoor school teacher for sixth graders, so as a kid on family outings, I learned the names of fungus on stumps," Weiss said. "I majored in field trips at Evergreen State College so I could get into the field every week," Weiss laughed. "It turns out an interpretive career was a great match for my passion about teaching and the outdoor world."

That passion was fueled as he worked in visitor centers during his college studies. "The students were getting a break from all that classroom work and I, the cool park ranger, would show them stuff like salmon, big loud machines and water pouring through this large monolithic structure. I was getting paid to tell stories!"

Corps of Engineers Photos

With a Bonneville Dam backdrop, David Weiss explains the lifecyle of salmon and the Bonneville fish program to visiting schoolchildren.

"After all this fun, the students would go back to their teacher, who'd have to do all the really hard work. Heck, I thought to myself, I don't need to be a teacher. I'll stick with this park ranger gig," Weiss said. "I did have to do some research to learn about Bonneville Lock and Dam and the Corps, since my supervisors insisted that my stories contain some facts."

After several part-time, seasonal jobs at Bonneville, Weiss landed a permanent position where he has provoked and satisfied the curiosity of many visitors. He also uses storytelling to deliver his interpretive messages. In one program he tells the story of the source of the Columbia as a small stream crossing a golf course in Canada. He contrasts it with the mighty river flowing through the dam. Using verbal images, he transports people to the source of this Great River of the West.

Weiss loves the fact that Bonneville is so large and busy. With so many visitors, he is always expanding his knowledge and the target audience for his messages about salmon biology, Columbia Gorge geology, hydropower production and local history, from the Lewis and Clark days until the present.

During his career at Bonneville Dam, Weiss has established a wide-reaching network of partners including interpreters and environmental educators from other federal, state, and local natural resource agencies. He humbly admits he could not do it alone and attributes many of his ideas to other park rangers and gets much of his support from Corps employees.

"Our managers here at Bonneville trust us enough to do our work the way we feel is best, and they do their best to get us the resources to do that work," Weiss said. "But this award is a phenomenal event, a highlight in my career. I am honored to have my work acknowledged this way."

Corps sees colors as they cross the finish line

By Hailee Parks, Public Affairs Office

As Portland District Commander Col. Thomas O'Donovan, a member of the "Hard Corps" team, crossed the finish line at the Hood to Coast relay, he held the U.S. Army Corps of Engineers flag high, signifying the team's success for the second year in a row. They didn't take first place, but they crossed the finish line together – and without any of the major incidents they had the previous year. For instance, this year their support van didn't get stuck in a ditch, leaving the team to hitchhike, which also meant they crossed the finish line before it got dark so a crowd was still gathered to watch.

The Hood to Coast Relay was started in 1982 by a group of avid runners who wanted to challenge themselves. The course runs 197 miles, beginning at Mount Hood's Timberline Lodge and ending on the beach in Seaside. Each team consists of 12 runners, each running three legs of varying distances. Support vans accompany the runners offering water and moral support while they transport the other team members to their next exchange point. Each leg is rated independently for difficulty, so team captains can match their teammates' abilities and experiences with various runners. Coming straight down the mountain from Timberline, the first leg is rumored to be a "notorious killer;" Northwestern Division's Maj. Brian Brobeck was the lucky team mate who got to start this first leg of the race.

"Hard Corps" members Simmons and Schulz and volunteer "Timer Dave" Schierman wait for their runner to arrive.

With water in hand, Petersen nears the end of his several-mile leg toward the Coast.

Soldiers watch for the colors, or flag, when they're in battle because it gives them a point to regroup. Like soldiers, the team members of "Hard Corps" watched for the flag at every exchange point.

"It is just a sea of people out there, but you would look around and see the Corps flag and know just where they were," said team captain Mindy Simmons. "After what happened last year, it was such a relief to find the flag there and know nothing has gone wrong just yet."

Simmons was one of those looking for her hitchhiking teammates during last year's race. Whether it was the flag or the fact that their luck had turned, no mishaps occurred this year. It was O'Donovan who wanted to carry the flag from hood to coast with them.

"The flag symbolizes a team. I wanted to reflect that." O'Donovan said.

When Lt. Gen. Van Antwerp took command of the U.S Army Corps of Engineers in May 2007, he spoke of a T.E.A.M concept: about how Trust, Excellence, its All about people and Motivation are keys to making a good team. When you do all the team things, that is when you leave a legacy, he added.

"Each of these concepts were foundations to our 'Hard Corps' team," O'Donovan said. "I felt carrying the Corps colors helped motivate our team effort."

The race rules allow teams to finish together, but the rest of the team may only accompany the final runner for the last quarter mile. O'Donovan, like countless soldiers before him, rallied to the flag: as the final runner, he met the rest of his team beneath the Corps flag; they crossed the finish line together.

With a race time of 26 hours, 33 minutes and 9 seconds, "Hard Corps" placed 28th out of 116 teams in its division. While they did beat their time from last year, members aren't quite sure if that was because of improved performance, or just because they avoided the chaos they experienced last year.

One thing is certain: O'Donovan hopes that "Hard Corps" has started a new tradition: carrying the Corps flag from Hood to Coast every year.

Corps of Engineers Photos

Team members and volunteers celebrate their arrival at Seaside, Ore., at the end of the Hood to Coast relay. First row, from left: Scott Hull, Jon Gornick, Col. Tom O'Donovan, Mindy Simmons; second row, from left: Dave Schierman*, Steve Bredthauer, Maj. Brian Brobeck, Molly Dix, Dave Dix, Lt. Col. Phil Kaufmann, Matt Rea, Mel Batista, Sharon Schulz, Jeff Sedey*, Erik Petersen.*
**Volunteer (other volunteers not pictured but gratefully acknowledged: Tracy Bell, Corrie, Veenstra, Linda Grove, Erika Stewart, Dave Austin, Kimberly Oldham).*

Portland District completes MCR jetty interim repairs

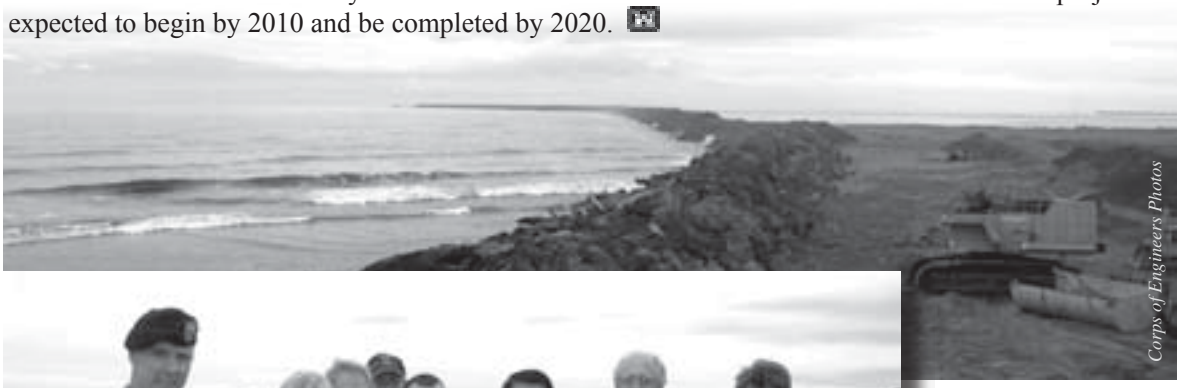
One of the first missions assigned to the Portland District in the 1870s was safeguarding navigation, which included constructing jetties that helped limit dangerous shoaling along the Oregon coast. In 1884, construction began on jetties for the Mouth of the Columbia River and in 1895 the south jetty extended four miles into the Pacific Ocean.

The forces of water and weather quickly went to work on the structure and by 1902 more work was needed to support navigation of the ever-increasing number of ships calling at Portland. Construction of the north jetty began in 1914 and the two-and-a-half mile project was completed in 1917.

As with the south jetty, wind and waves soon began taking their toll on the north jetty. Although some repairs were made, the jetties began to deteriorate; erosion washed away the ends, considerably shortening them and threatening breaches in the stone nearer the mouth of the river.

In 2005, the Corps began nearly $25 million in repairs to the north and south jetties. On Sept. 14, Portland District Commander Col. Tom O'Donovan hosted a ceremony at the south jetty project to celebrate the completion of the interim repairs to the north and south jetties. Rep. David Wu, (D-OR), congratulated the Corps and its contractors, Tapani Underground (north jetty) and Kiewit Pacific (south jetty) for work that will help safeguard ships traveling up the Columbia River. Attended by representatives from local communities and ports, as well as state and federal agencies, the event celebrated the completion of the repairs and focused attention on the upcoming Major Rehab planned for the jetties in the coming years.

The Major Rehab study will determine the best shape and composition the jetties should take to help them withstand another century of wind and waves. Construction on the multi-million dollar project is expected to begin by 2010 and be completed by 2020.



Corps of Engineers Photos

Members of the MCR jetty interim repairs PDT stand with Rep. David Wu on the observation deck near the south jetty in Ft. Stephens State Park. While the interim repairs are complete, major rehabilitation plans are being prepared, with work scheduled for sometime in 2010.